

Properties and Changes in Matter

2-4 The student will demonstrate an understanding of the properties of matter and the changes that matter undergoes. (Physical Science)

2.4.1 Recall the properties of solids and liquids.

Taxonomy level: 1.2-A Remember Factual Knowledge

Previous/Future knowledge: In kindergarten (K-5.1), students classified objects by observable properties. This is the first time that students have investigated the three states of matter. This is foundational knowledge that will be further developed in 3rd grade (3-4.1) when students classify different forms of matter (including solids, liquids, and gases) according to their observable and measurable properties. In the 5th grade (5-4.2), students will compare the physical properties of the states of matter (including volume, shape, and the movement and spacing of particles).

It is essential for students to know the properties of solids and liquids.

Liquid

- A liquid is a form of matter that does not have its own shape.
- A liquid takes the shape of the container it is in.
- A liquid can flow, be poured, or spilled.
- A liquid can change to a solid by freezing, for example, water to ice cubes.

Solids

- A solid is the only form of matter that has its own shape.
- Some examples of solids are a chair, a rock, or a table.
- Some properties of solids are color, shape, size, weight, texture, sinks, floats, hardness, and magnetism.

It is not essential for students to know about gases at this grade level. They will be introduced to that concept at third grade in indicator 3-4.1.

Assessment Guidelines:

The objective of this indicator is to *recall* the properties of solids and liquids; therefore, the primary focus of assessment should be to remember these properties. However, appropriate assessments should also require students to *identify* objects as a solid or a liquid; or *recognize* the properties of solids and liquids